

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously Presented) A network system, comprising:
a first network;
a second network separated from the first network;
an appliance connectable to at least one of the first and second networks; and
a network manager connectable to at least one of the first and second networks, for controlling and monitoring the appliance, wherein:
the appliance and the network manager each respectively comprise an interface apparatus; and
the interface apparatus comprises:
a first interface module including a first universal asynchronous receiver and transmitter; and
a second interface module including a second universal asynchronous receiver and transmitter connected to the first universal asynchronous receiver through a serial interface for serial communication.
2. (Previously Presented) The system of claim 1, wherein the first interface module is:
connectable to the first network; and
transmits or receives a message to or from an inside control means based on a predetermined control protocol.
3. (Previously Presented) The system of claim 2, wherein the second interface module is:
based on the predetermined control protocol;
connected to the first interface module; and
connectable to the second network.

4. (Previously Presented) The system of claim 3, wherein the appliance and the network manager are connected to each other through the first network by the first interface module, or through the second network by the first and second interface modules.

5. (Previously Presented) The system of claim 2 or 3, wherein the first and second interface modules each respectively comprise an application layer using the message, a network layer, a data link layer and a physical layer under the predetermined control protocol, and the data link layers each respectively comprise the universal asynchronous receiver and transmitter.

6. (Previously Presented) The system of claim 1, wherein the first interface module is transmits or receives a message to or from an inside control means; and
the second interface module is:
based on a predetermined control protocol;
connected to the first interface module; and
connectable to the second network.

7. (Previously Presented) The system of claim 6, wherein the first interface module comprises an application layer using the message, a network layer and the universal asynchronous receiver and transmitter under the control protocol, and the second interface module comprises an application layer, a network layer, a data link layer, a physical layer and the universal asynchronous receiver and transmitter connected to the universal asynchronous receiver and transmitter of the first interface module under the control protocol.

8. (Original) The system of one of claims 1 to 4, wherein the first network uses a dedicated medium.

9. (Cancelled)

10. (Original) The system of one of claims 1 to 4 or 6, wherein the second network uses a shared medium.

11. (Cancelled)

12. (Previously Presented) An interface apparatus of a network system, comprising:
a first interface module based on a predetermined control protocol connectable to a first network connected to the network system, for transmitting/receiving a message to/from a control means of an appliance composing the network system, wherein the first interface includes a first universal asynchronous receiver and transmitter; and
a second interface module based on the control protocol connected to the first interface module, disconnected from the first network, and connectable to a second network connected to the network system, wherein the second interface module includes a second universal asynchronous receiver and transmitter connected to the first universal asynchronous receiver and transmitter through a serial interface for serial communication.

13. (Previously Presented) The apparatus of claim 12, which is connected to the network system through the first interface module or the first and second interface modules according to a communication method of the network system.

14. (Previously Presented) The apparatus of claim 13, wherein the first and second interface modules each respectively comprise an application layer using the message, a network layer, a data link layer and a physical layer under the control protocol, and the data link layers each respectively comprise the first and second universal asynchronous receivers and transmitters for connecting the first interface module to the second interface module.

15. (Original) The apparatus of one of claims 12 to 14, wherein the first network uses a dedicated medium.

16. (Cancelled)

17. (Original) The apparatus of one of claims 12 to 14, wherein the second network uses a shared medium.

18. (Cancelled)

19. (Previously Presented) An interface apparatus of a network system, comprising:
a first interface module for transmitting/receiving a message to/from a control means of an appliance composing the network system, wherein the first interface includes a first universal asynchronous receiver and transmitter; and
a second interface module based on a control protocol connected to the first interface module and connectable to a network connected to the network system, wherein the second interface module includes a second universal asynchronous receiver and transmitter connected to the first universal asynchronous receiver and transmitter through a serial interface for serial communication.

20. (Previously Presented) The apparatus of claim 19, wherein the first interface module comprises an application layer using the message, a network layer and the first universal asynchronous receiver and transmitter under the control protocol, and the second interface module comprises an application layer, a network layer, a data link layer, a physical layer and the second universal asynchronous receiver and transmitter connected to the universal asynchronous receiver and transmitter of the first interface module under the control protocol.

21. (Original) The apparatus of claim 19 or 20, wherein the network uses a shared medium.

22. (Cancelled)